

CLAIMS

1. A measuring probe comprising:
a holder portion attached to a subject; and
an optical fiber for at least one of irradiation and detection
whose distal end portion on a subject side is retained by the holder
portion,

wherein the optical fiber is led out from a side surface of
the holder portion and is bent inside the holder portion such that
the distal end portion is directed to the subject when the holder
portion is attached to the subject.

2. A measuring probe according to Claim 1, wherein an outer
peripheral coating is removed from a bent portion of the optical
fiber inside the holder portion.

3. A measuring probe according to Claim 1, wherein the holder
portion has a first member to be brought into contact with the subject
and a second member combined with the first member.

4. A measuring probe according to Claim 3, wherein the first
member is more flexible than the second member, and wherein the
second member is more rigid than the first member.

5. A measuring probe according to Claim 3, wherein a protecting

groove into which the optical fiber is inserted is formed in at least one of the first member and the second member.

6. A measuring probe according to Claim 1, wherein the holder portion is provided with a through-hole through which the distal end portion of the optical fiber is exposed and an annular protrusion protruding so as to surround the distal end portion of the optical fiber.

7. A measuring probe according to Claim 1, wherein a space portion for accommodating the bent portion of the optical fiber is provided inside the holder portion.

8. A measuring probe according to Claim 7, wherein the holder portion has a first member to be brought into contact with the subject and a second member combined with the first member, and wherein the space portion is formed by combining recesses respectively provided in the first and second members.

9. A measuring probe according to Claim 1, wherein an optical fiber fixing member for fixing the distal end portion of the optical fiber is arranged in the holder portion.

10. A measuring probe according to Claim 9, wherein a space

portion for accommodating the bent portion of the optical fiber and the optical fiber fixing member is provided in the holder portion, and wherein a diameter of the space portion is of the same size as an outer peripheral diameter of the optical fiber fixing member.

11. A measuring probe according to Claim 8, wherein the optical fiber fixing member has a spring mechanism which extrudes the optical fiber by a minute amount to an exterior of the holder portion while retaining the optical fiber.

12. A measuring probe according to Claim 1, wherein an optical fiber protecting member for protecting the bent portion of the optical fiber is arranged inside the holder portion.

13. A measuring probe according to Claim 1, wherein a height adjustment jig for adjusting an amount by which the optical fiber protrudes from the holder portion is arranged inside the holder portion.

14. A measuring probe according to Claim 1, further comprising a curving means provided on the holder portion, for maintaining the holder portion in a configuration curved along the subject.

15. A measuring probe according to Claim 14, wherein the curving

means is mounted to the subject side of the holder portion and is a base plate curved in advance.

16. A measuring probe according to Claim 14, wherein the curving means is replaceable with respect to the holder portion.

17. A measuring probe according to Claim 14, wherein the curving means is provided with a connecting portion for connection with an adjacent curving means.

18. A living body optical measuring device comprising a measuring probe having a plurality of optical fibers that irradiate a subject with measurement light and receive the measurement light returning from the subject, the measuring probe being attached to the subject,

wherein the optical fibers are led out from a side surface of the measuring probe and are bent inside the measuring probe portion such that their distal end portions are directed towards the subject when the measuring probe is attached to the subject.

19. A living body optical measuring device according to Claim 18, wherein the measuring probe has a plurality of holder portions,

wherein, in each of the holder portions, the distal end portions of the plurality of optical fibers are arranged at intervals, and

wherein the optical fibers are led out from a side surface of the holder portion.

20. A living body optical measuring device according to Claim 18, further comprising a fastening fixing member which is put on the subject from above the measuring probe so as to surround the subject and which prevents the measuring probe from being detached from the subject.